

# Cooling Pilot Project:

## Hillsborough City School District

Presented By:

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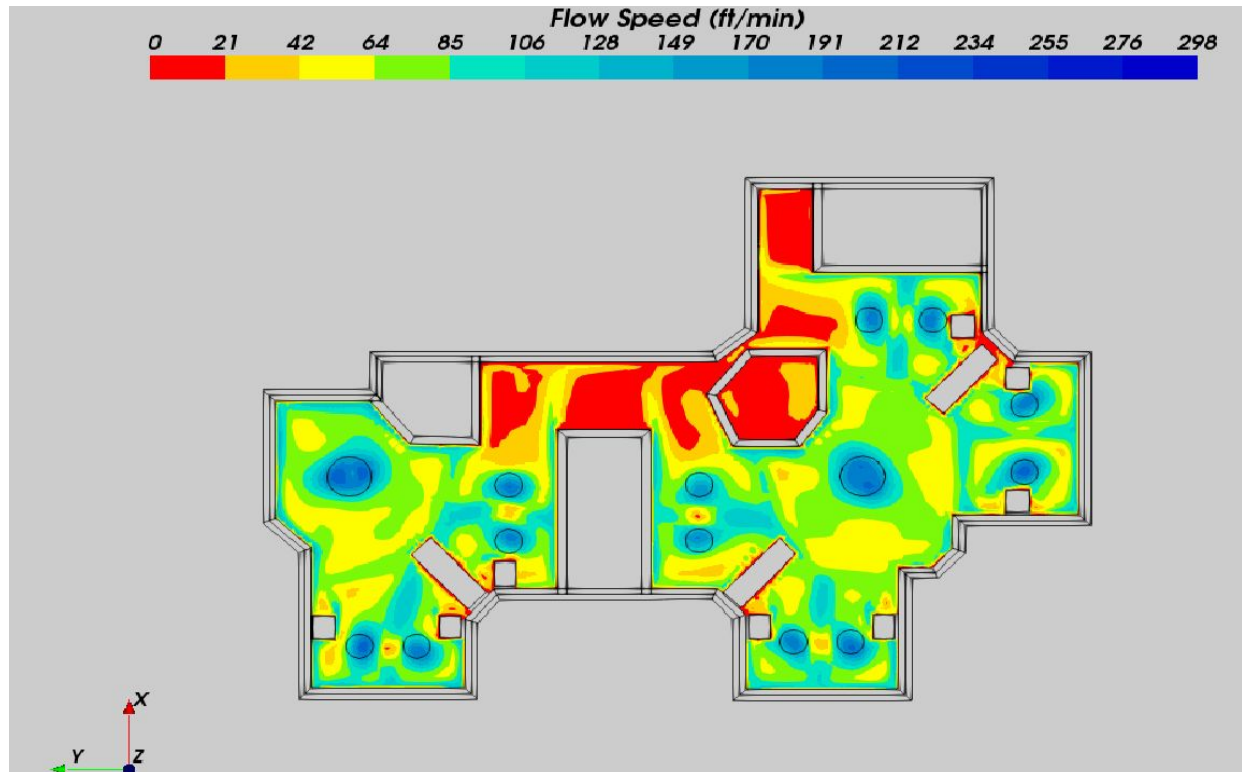
# Background

- ▶ Facility Master Plan meetings
  - ❑ Common issue with need to provide cooler classrooms
  - ❑ Benefits of learning in thermal comfort
- ▶ October Board Meeting Presentation
  - ❑ Active and Passive Cooling Strategies
  - ❑ Proposed Pilot Project
  - ❑ Estimated Costs

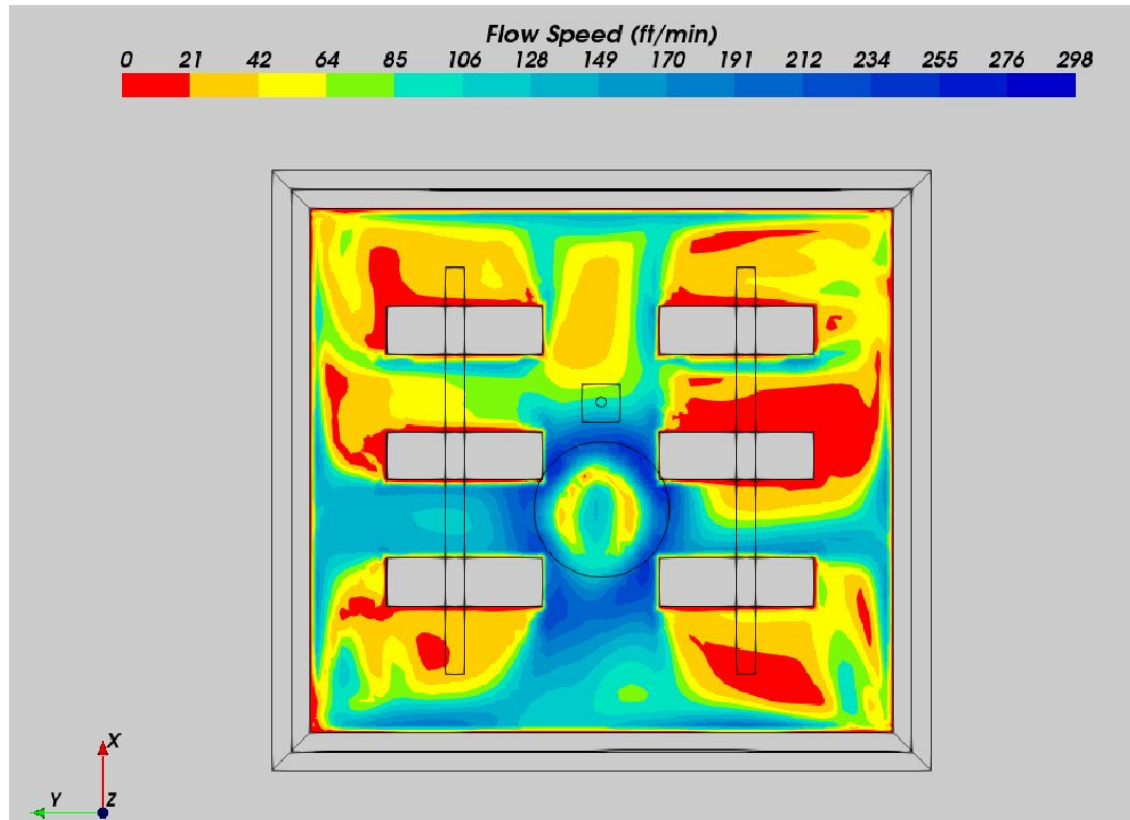
# Updates on Pilot Cooling Project

- ▶ Met with Ceiling Fan Vendor
  - ❑ West Parent with Norman-Wright Co.
  - ❑ Reviewed School Sites
  - ❑ Obtained Ceiling Fan Modeling & Recommendations

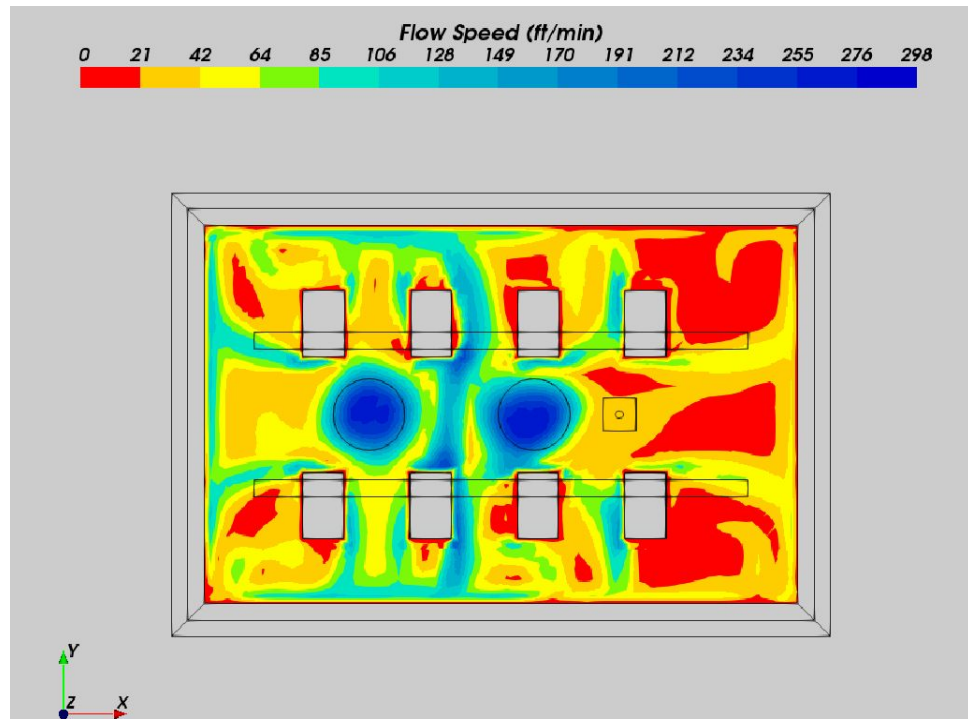
# Ceiling Fan Modeling at South



# Ceiling Fan Modeling at West One Fan



# Ceiling Fan Modeling at West Two Fans



# Fan Recommendations



# Fan Recommendations

- ▶ Number of Fans Considered:
  - ❑ One large fan per classroom
  - ❑ Two regular sized fans per classroom
  - ❑ Four regular sized fans per classroom
  
- ▶ Type of Fans:
  - ❑ The 52” Haiku L fans - 11 lbs. - \$700
  - ❑ The 84” Haiku fans - 26 lbs. - \$1600
  - ❑ Includes LED light with remote control
  - ❑ Aluminum Construction



# Exhaust Fans

- ▶ Reconsidered Recommendation
  - ❑ Existing Heater provides Fan Only mode.
  - ❑ Structural Engineer to confirm penetrations through structure meet DSA requirements.
  - ❑ If future Air Conditioning is implemented, then separate exhaust fan would be obsolete.

# Summary of Recommendations

Site	Add Insulation	Attic Vents	Ceiling Fans
Crocker M.S.	✓	✓	✓
North E.S.			✓
South E.S.			✓
West E.S.			✓

# Estimated Costs

## Costs per classroom (+/- 1000 SF):

- ▶ Add insulation: \$2,000
- ▶ Add attic vent: \$1,500
- ▶ Add 2 ceiling fans: \$3,000
  - \$4,000 at South due added fan for pod and high ceilings

# Proposed Pilot Project Budget

- ▶ **Crocker Middle School**
  - ❑ 4 Classrooms = \$26,000
- ▶ **North Elementary School**
  - ❑ 4 Classrooms = \$12,000
- ▶ **South Elementary School**
  - ❑ 4 Classrooms = \$16,000
- ▶ **West Elementary School**
  - ❑ 4 Classrooms = \$12,000

**Management Expenses \$10,000**

**Project Contingency \$10,000**

**Total Proposed Budget: \$86,000**

# Q&A

